

















**Ouick Installation Guide** 

10/100 Fast Ethernet Hub/Switch

#### Introduction

Thank you for purchasing an Asanté FriendlyNET 10/100 Fast Ethernet hub/switch. This product is designed to be the most affordable way to grow your home or small office network.

- Compatible with all industry-standard 10BaseT and 100BaseTX network adapters, switches, hubs and routers
- Easiest to install—connect power, network cables and be running in three minutes (or less)
- Quickly monitor your network with multi-colored LED
- Free telephone technical support when used with Mac OS, Linux, Windows 95/98/Me and Windows NT/2000 Professional/Server

This product is available in two configurations:

- FriendlyNET 16-port 10/100 Mbps Fast Ethernet hub
- FriendlyNET 16-port 10/100 Mbps Fast Ethernet switch (FS5016)

#### Packing List

Your package contains the following items:

- (1) FriendlyNET 10/100 Fast Ethernet hub/switch
- (1) Ouick Installation Guide (this document)
- (1) External power module

## **System Requirements**

Compatible with Apple Mac OS, Linux, Microsoft Windows 95/98/Me and Windows NT/2000 Professional/Server.

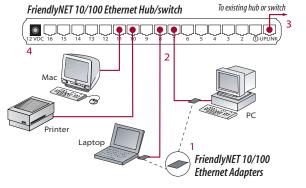
Requires a 10/100 Mbps Fast Ethernet port for each workstation, server or printer.

## Warranty

One year of free telephone support (7AM to 6PM MST), 24-hour support via web and ftp, with one year product warranty. AsantéCare optional extended technical support and product warranty is available.

#### Installation

Here's how to install this network hub/switch:



- 1. Connect a network cable from this hub/switch to your computer's Ethernet port. If your computer does not have an Ethernet port, you'll need to install an Ethernet network adapter (available separately) into your computer.
- 2. (Optional) Connect a network cable from this hub/switch's Uplink port to any standard (non-uplink) port on another hub, switch or router.

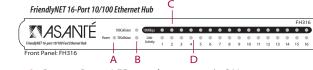
For FH316 only - The FH316 hub comes with advanced Asanté Extended Range operation. By flipping the small switch located on the side of the hub, the hub will behave in the following manner:

Normal Mode: Uplink to one other 10/100 hub with 5-meter cable or 10 Mbps hub with 100-meter cable. All ports will autonegotiate and transmit/receive data at 10/100 Mbps.

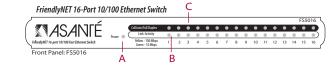
Asanté Extended Range Mode: Connect to anothe 10/100 hub or switch up to 100 meters away. All devices connected to the FH316 must be 100 Mbps devices only since all ports can only transmit/ receive data at 100 Mbps when operating in this mode.

3. Plug in the power cord into the unit and plug the external power module into an electrical outlet.

In a few moments, you will see the status of your network with these LED indicators:



- A. Power: Green LED on when power is ON.
- B. 100 and 10 Collision: Amber LED flashes if collision is detected during data exchange
- C. 100 Mbps:Amber LED is on for 100 Mbps, it's off for 10 Mbps.
- D. Link-Activity: Green LED is on when there is a valid network link to the network adapter. It flashes during network activity (transmit or receive).



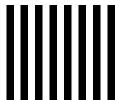
- A. Power: Green LED on when power is ON.
- B. Link-Activity: Yellow LED on if there is a valid 100 Mbps link established and flashes during data exchange. Green LED on if there is a valid 10 Mbps link established and flashes during data exchange.
- C. Full Duplex: Yellow LED on if the port is connected at full duplex.

Name Title Company Address 1 Address2 Citv State Zip/Postal Country Phone Fax Email Date of Purchase

Asanté Part Number

**Product Serial Number** 

CARDS NOLOGI



۵\		٦١	wa	۵۱	T 6 1 4 4
1)	What is your organization's primary business?	3)	What is your influence on purchasing decisions?	6)	Types of workstation opera systems:
0	Advertising Agency/	0	Authority to evaluate and purchase	0	Mac OS
0	Public Relations	0	Evaluate and recommend	0	Windows® 95/98
	CAD/CAM Graphic Arts Services Multimedia/Video Sales Finance College/University Higher Education K-12	0	Have you previously purchased an Asanté product? Yes	7)	Windows® NT/2000 Linux UNIX MS DOS Solaris Other: Number of nodes on your network: 2-10 10-50 50-100 100-500 500+ Type of network: LocalTalk Ethernet Fast Ethernet Gigabit Ethernet FDDI ATM
0	Manufacturing Medical/Dental Printers				
0	Prepress Publishing Transportation				
	Corporate/In-plant, Non- commercial In-house Graphic Services Other:	] ( ] (			
ĺ	My primary job function is (Check only one): Business Managemen (President,	_		0	
	Owner, VP, etc.) Communications/Publishing			,	Type of network operating systems:
0	Management Educational Management			_	Novell NetWare Microsoft NT/2000

# 10) Types of network management

**Z**ASANTÉ

Making Networking Simple

- IntraSpection
- AsantéView
- HP OpenView

- Management Information Systems
- Graphic Arts/Design Management
- Production Management
- Department Supervision/ Management

- AppleTalk/MacLAN Connect AppleShare
- UNIX/Linux

- SunNet Manager
- IBM NetView
- Optivity
- Other:

# Troubleshooting Tips

In the unlikely event your network is not operating properly, follow the troubleshooting tips below.

- Check your power connection. Is the green Power LED on? If not, plug the power module into a different AC outlet.
- Check your network cable. Is the green network Link LED on? If not, try connecting a "known good" Ethernet network cable between your hub and the adapter. You should see a Link LED on your hub and your network adapter.
- The maximum distance from any node (computer, printer, hub, switch, etc.) is 328 feet or 100 meters. Be sure your Category 5 UTP cable is not coiled, twisted or damaged. When connecting the hub to a computer, be sure your cable is wired for straight-through; pins 1, 2, 3 and 6 should be matched pin-for-pin on both ends. Note that pins 3 and 6 must use the same twisted pair; these are typically orange/white orange or green/white green.
- Check your computer's software. Check your operating system manual for instructions on configuring your network for file and print sharing.

#### Need more help?

Consult the Asanté website (www.asante.com) for additional troubleshooting tips and frequently asked questions (FAQ). You may also contact Asanté Technical Support during standard business hours (7am to 6pm MST, Monday-Friday).

support@asante.com

Phone: 800-622-7464 or 801-566-8991

FAX: 801-566-3787

### **Product Specifications**

Auto negotiation of IEEE 802u Fast Ethernet (100BaseTX) Network:

or IEEE 802.3 Ethernet (10BaseT)

FH316 – 16 port 10/100 dual speed Fast Ethernet hub,

RJ-45 connectors

FS5016 – 16 port 10/100 Fast Ethernet switch.

RJ-45 connectors

**Error Protection:** Automatically isolates faulty ports (auto-partition and

Automatic polarity detection and correction

Uplink port may be uplinked to additional hubs or switches Expansion:

(switch selectable)

12 VDC (AC power module included) Power:

Emissions: FCC Class B. CE

### rating Environment

32-104° F (0-40° C)

10-95% (non-condensing)

### Safety and Regulatory Compliance

#### FCC Compliance Statement This hardware device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If you suspect this equipment is causing interference, turn your unit on and off while your radio or TV is showing interference. If the interference disappears when you turn the unit off and reappears when you turn the unit on. something in the unit is causing interference. You can try to correct the interference by one or more of the following measures: 1) reorient or relocate the receiving antenna: 2) increase the separation between the equipment and the receiver: 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected: 4) consult the place of purchase or an experienced radio/television technician for additional suggestions. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Safety Advisory

- 1. This product should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power
- 2. Do not allow anything to rest on the power cord. Do not locate this product where people will walk on the cord.
- 3. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
- 4. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to service personnel.

# Visit Asanté at www.asante.com

### Main Corporate Telephone Numbers

800-662-9686 (Home/Office Solutions) 800-303-9121 (Enterprise Solutions) 408-435-8388

# Technical Support

801-566-8991 (Worldwide)

# Technical Support Fax

801-566-3787



Copyright © 2000 Asanté Technologies, Inc. Asanté, the Asanté logo and FriendlyNET are trademarks of Asanté Technologies. All other brand names and products are trademarks or registered trademarks of their respective holders. All features and specifications are subject to change without prior notice. 06-00585-00, 9/00